

**REMARKS**

This is intended as a full and complete response to the Office Action dated September 10, 2004, having a shortened statutory period for response set to expire on December 10, 2004. Claims 1-6 remain pending in the application and stand rejected by the Examiner. Please reconsider the claims pending in the application for reasons discussed below.

***Claim Rejections – 35 U.S.C. § 102***

Claims 1-6 stand rejected under 35 U.S.C. §102(e) as being anticipated by *Gysling, et al.* (U.S. Publication No. 2002/0152802).

Applicants respectfully traverse the rejection. Applicants submit that the Examiner misconstrues the teachings of *Gysling, et al.* Specifically, *Gysling, et al.* does not teach an iterative process to determine component flow rates or phase fractions, as claimed.

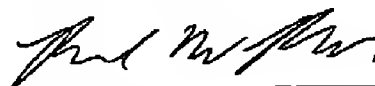
Rather, *Gysling, et al.* discloses an iterative process to determine a speed of sound of a mixture by evaluating an error term at a given frequency and varying trial values of the speed of sound of the mixture until the error term goes to zero. Further, the iterative process disclosed in *Gysling, et al.* does not calculate values for quantiles of the mixture that are also measured. Thus, *Gysling, et al.* fails to teach, show or suggest using a predetermined model to calculate values for measured mixture quantiles based on speed of sound values for each of the components and trial values for each of either component flow rates or phase fractions, as recited in claims 1 and 4, and claims dependent thereon. Accordingly, Applicants respectfully request withdrawal of the rejection and allowance of the claims.

### **Conclusion**

The secondary reference made of record is noted. However, it is believed that the secondary reference is no more pertinent to the Applicants' disclosure than the primary reference cited in the office action. Therefore, Applicants believe that a detailed discussion of the secondary reference is not necessary for a full and complete response to this office action.

The references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed. Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,



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